AMENDMENT TO THE CLAIMS:

Without prejudice, the **Listing of Claims** given below will replace all prior versions, and listings of claims in the application.

LISTING OF CLAIMS:

1. (Previously presented) Apparatus for generating in situ in a tissue a cytotoxic agent which destroys the tissue, the apparatus comprising:

A. at least two electrodes adapted to be attached to the tissue;

B. means to apply a voltage across the electrodes to cause a current to flow through the tissue which brings about an electrochemical reaction yielding said cytotoxic agent; and

C. means to deliver to the tissue a reagent which, when current flows through the tissue, reacts with the material of one of the electrodes to produce said agent.

2. (Cancelled)

3. (Previously presented) Apparatus as set forth in claim 1 in which said reagent is an electrolyte.

4. (Original) Apparatus as set forth in claim 3 in which said electrode is made of platinum and said electrolyte is ammonium dichloride.

5. (Previously presented) Apparatus as set forth in claim 1 in which one electrode is hollow to form a pipe for delivering said reagent to said tissue.

6. (Previously presented) Apparatus as set forth in claim 1 further including a sensor to detect the cytotoxic agent in said tissue and to produce a signal whose magnitude depends on the potency of the agent, and means responsive to said signal to control the current to optimize the efficacy of the agent.

7. (Previously presented) Apparatus as set forth in claim 1 in which one of the electrodes is formed from a metal in the platinum class.

8. (Previously presented) Apparatus as set forth in claim 1 in which one of the electrodes are formed from titanium, and said reagent is reactive therewith.

9. (Previously presented) Apparatus as set forth in claim 1 further including means to deliver to the tissue a photosensitive electrolyte, and optical means to illuminate the electrolyte.

10. (Currently Amended) A kit for treating specified tissue in a patient, said kit comprising:

A. a working electrode and a counterelectrode, each electrode adapted to be positioned in said patient within or near said tissue;

B. means for applying a [voltage] potential difference effective to induce a current between the electrodes;

C. means for regulating the [voltage] potential difference across the electrodes;

D. a precursor of a compound having cytotoxic activity against the tissue; and

E. means for introducing said precursor into said patient into or near said tissue, said precursor being activated by reaction with at least one of said electrodes, wherein an electrochemical reaction yields the cytotoxic activity.

11. (Original) The kit of claim 10, wherein at least one of said electrodes is adapted to receive a fiber optic for delivering light into or near said tissue effective to activate said precursor.

12. (Previously presented) The kit of claim 10, wherein one of said electrodes is hollow and perforated and said precursor is introduced thereinto.

13. (Currently Amended) The kit of claim 10, wherein said [voltage] potential difference is regulated in a pulsed manner effective to deliver pulsed dosages of said precursor.

14. (Currently Amended) The kit of claim 10, wherein said [voltage] potential difference is regulated in a pulsed manner effective to activate said precursor in pulsed dosages.

15. (Previously presented) A method for treating a tissue in a patient, comprising:

A. providing an in vivo current passing through or near said tissue;

B. providing in or near said tissue a precursor of a compound having cytotoxic activity against said tissue; and

C. activating said precursor to be cytotoxic, wherein said current is provided by electrodes and said precursor is activated by reaction with at least one of said electrodes.

16. (Original) The method of claim 15, wherein said precursor is activated by said current.

17. (Cancelled)

18. (Original) The method of claim 15, wherein said precursor is activated by light.

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Previously presented) The method of claim 67, wherein the activation of the precursor is regulated as a function of the monitored amount of activated compound.

23. (Previously presented) The method of claim 15, wherein said reaction is catalyzed.

24. (Previously presented) The method of claim 15, wherein said electrode is consumed by reaction with said precursor.

25. (Cancelled)

26. (Previously presented) The method of claim 68, wherein said metal is selected from the group consisting of Pt, Pd, Ru, Rh, Os, Ir, and mixtures thereof.

27. (Previously presented) The method of claim 24, wherein said compound comprises a metal.

28. (Original) The method of claim 27, wherein said metal is selected from the group consisting of Pt, Pd, Ru, Rh, Os, Ir, and mixtures thereof.

29. (Original) The method of claim 15, wherein the patient is a human.

30. (Original) The method of claim 15, wherein the patient is a non-human.

31. (Previously presented) The method of claim 65 wherein at least two compounds are administered simultaneously.

32. (Original) The method of claim 31, wherein said compounds are activated simultaneously.

33. (Original) The method of claim 31, wherein said compounds are activated serially.

34. (Previously presented) The method of claim 65, wherein at least two compounds are administered serially.

35. (Original) Apparatus as set forth in claim 1, wherein the tissue is tumorous.

36. (Previously presented) The method of claim 15, wherein the tissue is tumorous.

37. (Previously presented) Apparatus for generating in situ in a tissue an agent which destroys the tissue, the apparatus comprising:

A. at least two electrodes adapted to be attached to the tissue;

B. circuitry to apply a voltage across the electrodes to cause a current to flow through the tissue which brings about an electrochemical reaction yielding said

agent;

C. a sensor to detect the agent in said tissue and to produce a signal one of whose parameters depends on at least one of the potency and activity of the agent, and

D. a processor responsive to said signal to control said current to optimize the efficacy of said agent.

38. (Previously presented) Apparatus as set forth in claim 37 in which one electrode is hollow to form a pipe for delivering a reagent to said tissue.

39. (Previously presented) Apparatus as set forth in claim 37 further comprising a delivery system to deliver to the tissue a photosensitive agent, and an optical system to illuminate the agent.

40. (Previously presented) The apparatus of claim 37 wherein the at least one of the electrodes has a very large effective surface area to minimize the effects of polarization.

41. (Previously presented) The apparatus of claim 37 wherein at least one of said electrodes comprises an alloy of gallium.

42. (Previously presented) The apparatus of claim 37 wherein the electrode material controls at least one of the course and speed of the reactions whose products are said agent.

43. (Previously presented) The apparatus of claim 37 wherein said agent is cisplatin.

44. (Currently Amended) The apparatus of claim 37 wherein said sensor measures at least one of Ca++, pH, and p02.

45. (Previously presented) A kit for treating specified tissue in a patient, said kit comprising:

A. a working electrode and a counterelectrode, each electrode adapted to be

positioned in said patient within or near said tissue;

B. circuitry for applying a voltage effective to induce a current between the electrodes;

C. a voltage regulator for regulating the voltage across the electrodes;

D. a precursor of a compound having activity against the tissue; and

E. a system for introducing said precursor into said patient into or near said tissue, said precursor being activated by a catalyzed reaction with at least one of said electrodes wherein an electrochemical reaction yields the activity.

46. (Previously presented) The kit of claim 45, wherein one of said electrodes is hollow and has apertures, and said precursor is introduced thereinto.

47. (Previously presented) The kit of claim 45, wherein said voltage is regulated in a pulsed manner effective to deliver pulsed dosages of said precursor.

48. (Previously presented) The kit of claim 45, wherein said voltage is regulated in a pulsed manner effective to activate said precursor in pulsed dosages.

49. (Previously presented) A method for treating a tissue in a patient, comprising:

A. providing an in vivo electrical current passing through or near said tissue;

B. providing in or near said tissue a precursor of a compound having activity against said tissue; and

C. activating said precursor, wherein said current is provided by electrodes and said precursor is activated by catalyzed reaction aided by at least one of said electrodes.

50. (Previously presented) The method as set forth in claim 49 in which one electrode is hollow to form a pipe for delivering a reagent to said tissue.

51. (Previously presented) The method as set forth in claim 49 further comprising delivering to the tissue a photosensitive agent, and illuminating the agent.

52. (Previously presented) The method of claim 49 wherein the at least two electrodes comprise at least two concentric electrodes sized to minimize the effects of polarization.

53. (Previously presented) The method of claim 49 wherein at least one of said electrodes comprises an alloy of gallium.

54. (Previously presented) The method of claim 49 further comprising controlling, using the electrode material, at least one of the course and speed of the reactions whose products are said agent.

55. (Previously presented) The method of claim 49 wherein said agent is cisplatin.

56. (Currently Amended) The method of claim 49 further comprising measuring at least one of Ca++, pH, and P02•

57. (Previously presented) The method of claim 49, comprising providing a plurality of different precursor compounds for activation.

58. (Previously presented) The method of claim 49 further comprising monitoring the amount of precursor activated in vivo.

59. (Previously presented) The method of claim 49 further comprising regulating the activation of the precursor as a function of a monitored amount of activated compound.

60. (Previously presented) The method of claim 57, wherein said compounds are activated simultaneously.

61. (Previously presented) The method of claim 57, wherein said compounds are activated serially.

62. (Currently Amended) The method of claim 49 further comprising controlling the electrical current to minimize any necrosis [cell death].

63. (Previously presented) The method of claim 49 further comprising introducing a non-cytotoxic isomer into the tissue and exposing it to light energy resulting in photo-assisted isomerization.

64. (Currently Amended) The apparatus of claim 40 wherein one of said electrodes is a counterelectrode and the counterelectrode has a very large porous surface area sufficient to [use] utilize said counterelectrode as a reference electrode.

65. (Previously presented) A method for treating a tissue in a patient, comprising:

A. providing an in vivo current passing through or near said tissue;

B. providing in or near said tissue precursors of a plurality of different compounds, each compound having cytotoxic activity against said tissue; and

C. activating said precursors to be cytotoxic.

66. (Previously presented) A method for treating a tissue in a patient, comprising:

A. providing an in vivo current passing through or near said tissue;

B. providing in or near said tissue a precursor of a compound having cytotoxic activity against said tissue; and

C. activating said precursor to be cytotoxic and wherein said activating is cyclical.

67. (Previously presented) A method for treating a tissue in a patient, comprising:

A. providing an in vivo current passing through or near said tissue;

B. providing in or near said tissue a precursor of a compound having cytotoxic activity against said tissue;

C. activating said precursor to be cytotoxic; and

D. monitoring in vivo the amount of precursor which is activated.

68. (Previously presented) A method for treating a tissue in a patient, comprising:

A. providing an in vivo current passing through or near said tissue;

B. providing in or near said tissue a precursor of a compound having cytotoxic activity against said tissue; and

C. activating said precursor to be cytotoxic, and wherein said precursor comprises a metal.

69. (Previously presented) The apparatus of claim 40 wherein each very large surface area electrode has a very large area due to the surface porosity of the electrode material.

70. (Previously presented) The apparatus of claim 40 wherein said very large area electrode can act as a reference electrode.